MEMO

- To prevent overcharging, charging automatically finishes after 12 hours (this time is can be changed with the Set mode).
- Charging is possible even while signals are being received.
- The DJ-X30 can be charged directly from the AC adapter without using the trickle charger.
- Set the charging time according the battery to be used. The time can be changed with the "Charging time setting" of the Set mode.

* The charging time of the battery pack (EBP-57N) is about 10 hours.

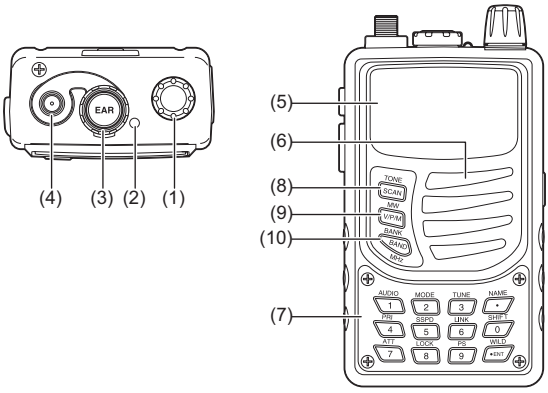
CAUTION

- Never attempt charging when AA-size dry cell batteries are installed. This may cause leakage or other problems.
- When not using the AC adapter (EDC-139), you must unplug it from the wall outlet.
- Signals received while charging may occasionally be interrupted with noise. This is not an abnormal phenomenon.
- When the Ni-MH battery pack is charged repeatedly before it becomes low, the battery deteriorates and cannot be fully charged. Do not charge battery pack unless the icon is displayed on the LCD. If you are concerned about remaining battery power, carry spare batteries with you.

4. Names and Functions of Parts

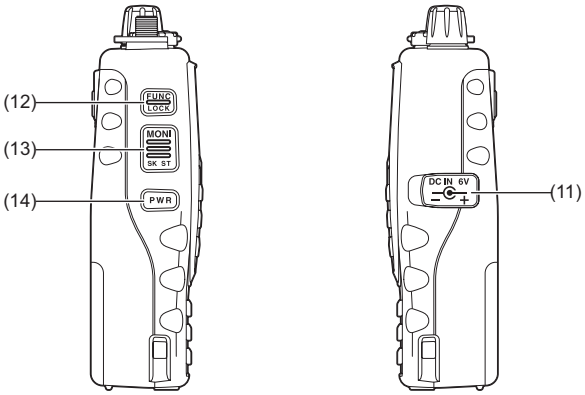
4-1 Names and Functions of Receiver Parts

4-1-1 Top/Front panel



No.	Item	Description
(1)	Dial	Rotate the dial to change frequency. Press the dial once to adjust the volume level. Pressing this dial while the F icon is displayed switches the receiver to the Set mode.
(2)	RX lamp	This lamp illuminates in green while the squelch is open. The lamp illuminates in red while the receiver is charging.
(3)	Earphone jack	Used to connect an earphone or the optional remote controller.
(4)	SMA antenna connector	Used to install the included whip antenna.
(5)	LCD	The status of the receiver is displayed. Refer to "LCD Display" for details.
(6)	Speaker	A low-profile, built-in speaker is provided.
(7)	Key pad	Use these keys to directly input a frequency or to directly jump to the Set mode. It is also possible to fully cover the keys for simple operation.
(8)	SCAN key	Used for scanning and Tone Squelch operations.
(9)	V/P/M key	Used to switch the operating mode.
(10)	BAND key	Used to switch the band, preset, or memory bank.

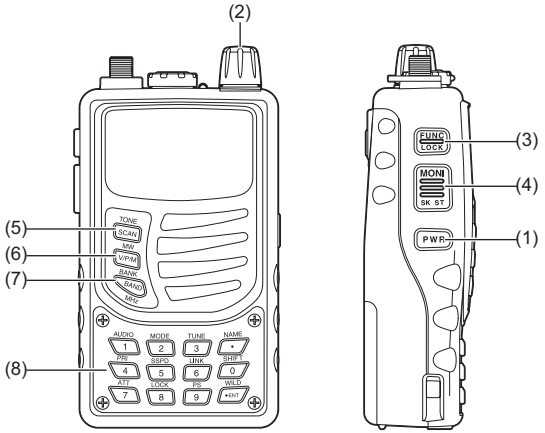
4-1-2 Side panel



Antenna side　　Dial side

No.	Item	Description
(11)	DC jack	This jack is for plugging in an external power supply.
(12)	FUNC (Function) key	Use this key in combination with other keys to access various functions. Holding down this key activates/ deactivates the Key-lock function.
(13)	MONI (Monitor) key	Press this key to open the squelch to receive weaker signals better. Rotating the dial while holding down this key allows you to set the squelch level.
(14)	PWR (Power) key	Holding down this key turns ON/OFF the power of the receiver.

4-1-3 Key operations



• **Main keys**

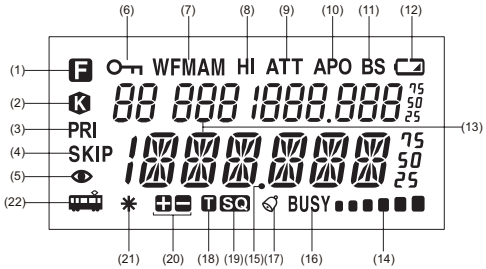
No.	Item	Description	After the FUNC Key is pressed	Holding Down for 1 Second	Dial Operation While Holding Down
(1)	PWR	Turn the power ON/OFF	———	Turn the power ON/OFF	———
(2)	Dial	Set frequency, volume, or other parameters/ values	Switch to the Set mode	———	———
(3)	FUNC	Switch between 10 MHz/1 MHz	———	Set/release the Key-lock function	———
(4)	MONI	Perform the Monitor function	Set the tuning step/ memory skip	———	Adjust the squelch level
(5)	SCAN	Start/stop scanning	Switch between the Tone Squelch and Reverse Tone Squelch 10 MHz/1 MHz	———	Change the scan mode
(6)	V/P/M	Switch between the VFO, Preset, and Memory modes	Write to the memory	———	———
(7)	BAND	Switch among 10MHz/1MHz	Switch banks	Switch frequencies between 10 MHz/ 1 MHz	Select bands/banks

• **Key pad**

No.	Item	Description	After the [FUNC] key is pressed
(8)	1	Enter 1	Set the wild key (Default: ATT)
	2	Enter 2	Set the reception mode
	3	Enter 3	Adjust the tuning of the shortwave bar-antenna
	4	Enter 4	Start Priority Monitoring.
	5	Enter 5	Set the scan speed
	6	Enter 6	Check the group setting
	7	Enter 7	Set the audio quality of received signals
	8	Enter 8	———
	9	Enter 9	———
	0	Enter 0	Set the frequency shift
	・	Enter a decimal point	Set the memory name
	・ENT	Confirm the entry	———

Reference: For operation details, refer to "Useful Functions/Operations When Key Pad is Installed".

4-2 LCD Display



No.	Icon	Description
(1)	F	Appears when the FUNC key is pressed.
(2)	K	Appears while the Normal Lock is activated.
(3)	PRI	Appears while the Priority Monitoring function is ON.
(4)	SKIP	Appears while the skip is set.
(5)		(Not used with the DJ-X30)
(6)		Appears while the Quick Lock is activated.
(7)	WFMAM	Indicates the modulation type (AM/FM/WFM).
(8)	HI	Appears while the audio quality is set to HI.
(9)	ATT	Appears while the Attenuator is activated.
(10)	APO	Appears while the Auto-Power-Off function is ON.
(11)	BS	Appears while the Battery save function is ON.
(12)		Appears when the remaining battery power is low.
(13)		Displays a receiving frequency or a setting value.
(14)		Indicates the strength of the receiving signals.
(15)		Blinks during scanning.
(16)	BUSY	Appears when a signal is received.
(17)		Appears while the Bell function is ON.
(18)	T	Appears/blinks while the Tone Squelch/Reverse Tone Squelch function is ON.
(19)	SQ	Appears when a tone signal is detected.
(20)		Indicates the shift direction.
(21)		(Not used with the DJ-X30)
(22)		(Not used with the DJ-X30)

5. Basic Operation

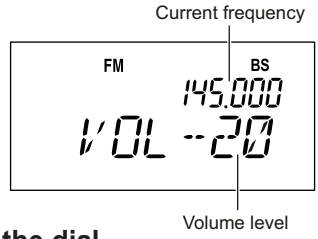
5-1 Turning the Power ON

1 Hold down the [PWR] key to turn the power ON.
Hold down the key again to turn the power OFF.

5-2 Adjusting Volume Level

Volume can be adjusted within the range of 31 levels (0 to 30).
The default is set to 20.

1 Press the dial once.
The current volume level is displayed.
The LCD should look something like the figure on the right.



2 Adjust the volume level by rotating the dial.
Turn the dial clockwise to increase the volume, and counterclockwise to decrease it.

CAUTION
- When using an earphone, be careful that the volume is not set too loud. Start from a small volume and gradually increase the level as you listen.

MEMO
When nothing is heard
- When the squelch is closed or the Mute function is activated, you will hear nothing even if you increase the volume level.
  For details, refer to the following sections "Adjusting Squelch Level" (☞P. ••) and "Mute function" (☞P. ••).

5-3 Adjusting Squelch Level

• What is "squelch"?

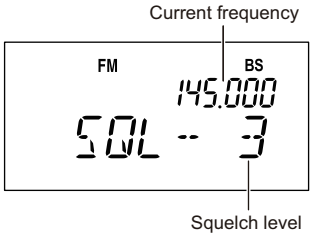
The Squelch function activates the speaker only when signals at a specified level or higher are received. This makes it easier to catch target signals by eliminating the static noise which occurs when no signals are received. When the squelch level is increased, the receiver can receive strong signals with less static noise, but cannot receive weak signals.
"To open the squelch" means to receive signals and activate the speaker. "To close the squelch" means the opposite. The strength of the signals required to open the squelch is determined by the squelch setting level. This level is adjustable because it varies in some degree depending on the location of signal reception and receiving frequency.

The squelch can be adjusted within the range of 10 levels (0 to 9).
The default is set to 3.

5-3-1 Operating procedure

1 Hold down the [MONI] key and rotate the dial.

The LCD should look something like the figure on the right.



The squelch level increases when the dial is rotated clockwise, and decreases when the dial is rotated counterclockwise.

- To keep the squelch constantly open, set the squelch level to 0.
- Scanning is disabled while the squelch is open. To enable scanning, adjust the squelch level until you cannot hear any static.

5-3-2 Monitor function

The Monitor function forces the squelch to open. When receiving signals are relatively weak or are often interrupted, it opens the squelch temporarily, regardless of the current squelch level. This function is activated when the "Monitor/Mute function setting" (☞P. ••) is set to the Monitor function.

There are two options for the Monitor function: PUSH and HOLD. When the [MONI] key is pressed, both options open the squelch and the "BUSY" icon appears on the LCD.

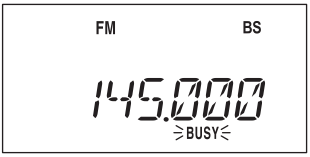
- When PUSH is selected, the squelch opens only while the [MONI] key is held down. When the [MONI] key is released, the squelch returns to the original level.
- When HOLD is selected, the squelch remains open once the [MONI] key is pressed. When the [MONI] key is pressed again, the squelch returns to the original level.
- For the procedure to switch between PUSH and HOLD, refer to "Monitor key operation setting" (☞P. ••).

MEMO
- When the Monitor function is used, the Tone Squelch function is also disabled temporarily.

5-3-3 Mute function

The Mute function cuts off the audio output even when signals are received and the squelch is open. This function is activated when the "Monitor/Mute function setting" (☞P. ••) is set to the Mute function.

There are also two options for the Mute function: PUSH and HOLD. When the [MONI] key is pressed, both options put the receiver on mute and the "BUSY" icon blinks on the LCD.



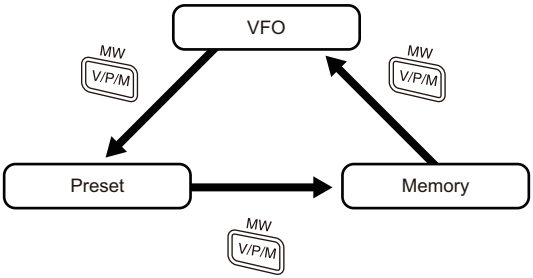
MEMO
- The Monitor function and Mute function cannot be selected simultaneously.

5-4 Operating Modes

The DJ-X30 has three operating modes: VFO, Preset, and Memory.

VFO mode	VFO stands for Variable Frequency Oscillator. You can select a desired frequency by rotating the dial.
Preset mode	The audio frequencies for AM/FM radio and TV channels (1 to 62) have already been set so that you can choose among them.
Memory mode	You can program frequencies to memory channels beforehand and call up one when you want. For the frequency programming procedure, refer to "Memory Mode" (☞P. ••).

- Switching between operating modes
  Pressing the MW V/P/M key changes operating modes in the following order.



When no data is programmed to memory channels, the Memory mode is skipped.

5-5 Frequency Settings

5-5-1 Setting frequencies in VFO mode

The VFO mode is a mode displayed when you turn ON the DJ-X30 for the first time with the factory default setting. In this mode, you can select receiving frequencies by rotating the dial.

● **Switching between bands**

• Every time you press the BANK/BAND key, the 14 bands shown in the table below are switched in the listed order.

• You can also select bands by rotating the dial while holding down the BANK/BAND key.

5-5-2 Specifying tuning step frequencies

Tuning steps refer to the intervals between the frequencies which have been assigned to radio communications and radio/TV broadcasts by the Ministry of Internal Affairs and Communications of Japan.
The default of the tuning steps can be changed.
The table below lists the tuning steps which can be changed.
The default is set to "Auto". It is not necessary to change the default for normal operation, however, this feature may be useful when you want to receive frequencies which are hard to tune with the "Auto" setting.

● **Switching among bands**

Every time the BANK/BAND key is pressed, the 14 bands shown in the following table are switched in the listed order.

Default	Frequency range	Reception mode
.100	(100 to 530 kHz) *1	AM
.531	(531 to 1620 kHz) *2	AM
2.000	(1.625 to 49.995 MHz)	AM
51.000	(50.000 to 75.995 MHz)	FM
76.000	(76.000 to 107.995 MHz)	WFM
118.000	(108.000 to 141.995 MHz)	AM
145.000	(142.000 to 169.995 MHz)	FM
175.750	(170.000 to 221.995 MHz)	WFM
270.000	(222.000 to 335.995 MHz)	AM
380.000	(336.000 to 429.995 MHz)	FM
433.000	(430.000 to 469.995 MHz)	FM
475.750	(470.000 to 769.995 MHz)	WFM
806.000	(770.000 to 959.995 MHz)	WFM
1295.000	(960.000 to 1299.995 MHz)	FM

- **Selectable tuning steps**

  Auto, 5 kHz, 6.25 kHz, 8.33 kHz, 10 kHz, 12.5 kHz, 15 kHz, 20 kHz, 25 kHz, 30 kHz, 50 kHz, 100 kHz, 125 kHz, 150 kHz, 200 kHz, 500 kHz, 1 MHz

  *1 : Only 1 kHz tuning step is available. This cannot be changed.

  *2 : Only 9 kHz tuning step is available. This cannot be changed.

1 Press the BANK/BAND key to select a band to change its tuning step.

2 Press the [FUNC] key to display the F icon on the LCD.

3 Press the [MONI] key. "AUTO" appears on the LCD.

4 Press the [MONI] key again. The selection changes from "AUTO" to other tuning steps.

5 Rotate the dial to select a tuning step. The selection returns to "AUTO" when the [MONI] key is pressed again.

6 Press the [FUNC] key to finish the setting. The LCD returns to the frequency display.

When a tuning step other than "AUTO" is selected for any one band, "AUTO" is cancelled for all bands. The last selected tuning step is stored for each band.

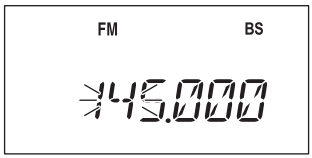
When "AUTO" is selected again for any one band, "AUTO" is selected for all bands. Then, the tuning step specified for the DJ-X30 is automatically selected.

5-5-3 10 MHz/1 MHz UP/DOWN operation

1 When the BANK/BAND/MHz key is held down while in VFO mode, the digit in the 10 MHz place in the frequency display starts blinking. You can increase or decrease the value of the digit by rotating the dial.

2 When the BANK/BAND/MHz key is pressed again, the digit in the 1 MHz place starts blinking. You can increase or decrease the value of the digit by rotating the dial.

Display during 10 MHz UP/DOWN adjustment



3 When the [FUNC] key or the BANK/BAND key is pressed, the frequency display returns to normal.

Display during 1 MHz UP/DOWN adjustment

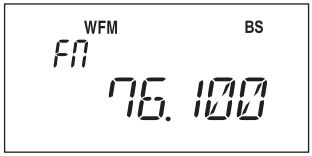
MEMO

• The 10 MHz/1 MHz UP/DOWN operation increases or decreases frequencies regardless of the frequency range of each band.

5

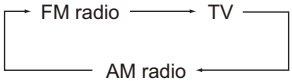
5-5-4 Setting frequencies in Preset mode

1 While in VFO mode, press the MW/V/P/M key once. The DJ-X30 is set to the Preset mode and the reception mode is displayed on the LCD.



2 Press the BANK/BAND key to select a desired band.

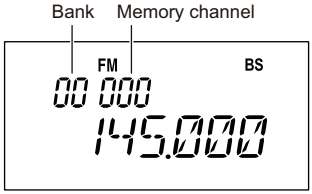
Every time the BANK/BAND key is pressed, the band is changed in the order shown on the right.



3 Rotate the dial to select a frequency (or a TV channel).

5-5-5 Setting frequencies in Memory mode

1 While in VFO mode, press the MW/V/P/M key twice. The DJ-X30 is set to Memory mode and a bank and a memory channel are displayed on the LCD.



2 Press the BANK/BAND key to select a desired bank.

3 Rotate the dial to select a channel.

You cannot select banks or channels which have not been programmed.

MEMO

- When no data is programmed to memory channels, the Memory mode is skipped.
- You can select banks also by rotating the dial while holding down the BANK/BAND key.

5-6 Memory Mode

Memory mode allows you to pre-program frequently-used frequencies into the DJ-X30's memory so that you can call up a desired frequency when you want. A "bank" is a location where frequencies are categorized for easier selection. Each frequency programmed to a bank is called a "channel." As shown in the separate frequency data list, the DJ-X30 stores popular channels as memory data, which can be edited according to need.

5-6-1 Memory types and usage

The DJ-X30 has the following four types of memory bank.

Bank for normal memory channels	Contains channels which are called up in normal operation in Memory mode. A total of 1000 channels of frequencies can be programmed. You can program your favorite frequencies to call them up easily.
Bank for programmed scan channels	Contains channels which are used for the programmed scan to find signals within a specified frequency range. Up to 50 pairs of frequency ranges (upper and lower limits) can be programmed.
Bank for skip-search channels	Frequencies programmed to this bank are skipped during VFO and programmed scans. Up to 100 channels can be programmed. It is useful to program unwanted frequencies that emit constant noise.
Bank for priority channels	This bank is used for the Priority Monitoring function (prioritized reception). Up to 100 channels can be programmed.

CAUTION

- You cannot program duplicated frequencies to the bank for skip-search channels. If you try to do so, an error beep will sound.
- The data factory-written to the memory has been edited by Alinco. Note that the assigned frequencies and modulation types may change at a later time. Although Alinco reviews the data from time to time, we do not guarantee the reliability of the data. It is the responsibility of the user to maintain this memory data by referring to commercially-available frequency lists or other references as necessary.

5-6-2 Programming a memory channel

1 In VFO mode, tune to the frequency you want to program by rotating the dial.

2 Press the [FUNC] key to display the F icon on the upper left of the LCD.

3 Press the BAND key to select a bank.

Each bank corresponds to the following memory channels.

0 to 9	Banks for normal memory channels (Note that the default settings of 0 to 9 may change due to reasons such as changes in memory data.)
PS	Bank for programmed scan channels
PA	Bank for skip-search channels
Pr	Bank for priority channels

Select an appropriate bank according to the usage.

4 Rotate the dial to select a channel.

The number of programmable channels differs depending on the bank type as follows:

0 to 9	000 to 099 (The number of programmable channels varies depending on how you separate each bank.)
PS	0A to 49b
PA	000 to 099
Pr	000 to 099

A blinking channel number indicates that no data is programmed to the channel.

A channel number which does not blink and is displayed constantly indicates that data has been programmed to the channel.

5 Press the MW V/P/M key to save the frequency.

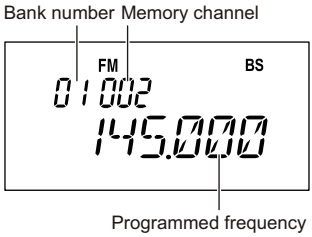
MEMO

- By default, it is not possible to overwrite the channel to which data has been programmed.
- To delete or edit memory data, disable the Write-protect (memory protection) function (☞P. ••) and then continue the procedure.

Example: When programming a frequency of 145.000 MHz to channel 002 of bank 01

(1) In VFO mode, tune to frequency 145.000.
(2) Press the [FUNC] key.
(3) Press the BANK key and select bank "01".
(4) Rotate the dial to select memory channel "002".
(5) Press the MW V/P/M key to complete the programming.

• Example display of a frequency programmed to a memory channel



CAUTION

- The bank for programmed scan channels requires programming of two frequencies to channels 00A and 00b.

Example: When a frequency of 145.020 MHz is programmed to channel 0A, and a frequency of 146.100 MHz is programmed to channel 0b.
The programmed scan operation scans the range between 145.020 MHz and 146.100 MHz which is programmed to channel 0b.

MEMO

- It is not possible to increase the number of memory channels.
- You can set alphanumeric characters, or symbols, instead of frequencies to represent the programmed memory channels. For details, refer to "Memory Naming Function" (☞P. ••).
- Memory channels can be called up by using either the dial or key pad.

5-6-3 Deleting a memory channel

1 **Disable the Write-protect (memory protection) function (☞P. ••).**

2 **Press the MW V/P/M key to switch to the Memory mode.**

3 **Select the channel you want to delete by rotating the dial.**

4 **Press the [FUNC] key to display the F icon on the LCD.**

5 **Press the MW V/P/M key while the F icon is displayed, to delete the frequency programmed to the memory channel.**

CAUTION

- Once data is deleted, it cannot be restored. Check carefully that you are deleting the right data.
- To prevent important data from being deleted accidentally, be sure to reactivate the Write-protect (memory protection) function (☞P. ••) after deleting data. If you forget to do this, all data in the memory will be deleted when the "Reset Function" (☞P. ••) is used.

• Items which can be programmed to memory channels

The following items can be stored in the memory channels.

- Frequency
- Shift frequency
- Shift direction
- Tone frequency
- Reception mode (Modulation type)
- Tone squelch/Reverse Tone Squelch setting
- Memory name
- Skip setting

MEMO

By using the free software provided by the Alinco website (http://www.alinco.com/) and the optionally available PC programming cable (ERW-4C/ERW-7), you can separate each bank of the normal memory channels as desired (up to 50 banks x desired number of channels less than 1000 channels).

This function enhancement is possible only via the editing software, and cannot be operated with the keypad of the receiver.

6. Useful Functions

6-1 Scanning Function

The Scan function automatically searches for active frequencies to locate signals.
The following scan types are available.

VFO scan	In VFO mode, the scan searches all frequencies within the selected band by using the tuning step specified in advance.
Preset scan	The scan searches the frequencies within the band specified in Preset mode.
Memory scan	In memory mode, the scan searches for only frequencies which have been programmed in the memory.
Programmed scan	The scan searches a range of frequencies between upper and lower limits which can be set by the user.

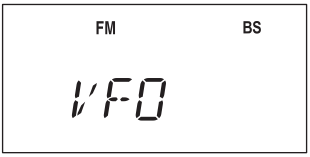
- **Operations common to all scan types**
  - Scanning stops when any one of the [FUNC], TONE SCAN, MW V/P/M, or BANK BAND keys is pressed.
  - The scanning direction can be changed by rotating the dial during scanning.
  - When the Monitor function is used, scanning is suspended to open the squelch temporarily. Releasing the Monitor function resumes scanning.
  - Scanning starts in the direction of the last scan. (Programmed scan, however, starts scanning from 00A to 00b.)
  - You can specify conditions to resume scanning. For the setting procedure, refer to "Scan Type Switching setting" (☞P. ••).

6-1-1 VFOScan

1 **Press the MW V/P/M key to switch to VFO mode, if necessary.**

2 **Press the BANK BAND key to select the band to scan.**

3 **While holding down the TONE SCAN key, rotate the dial until "VFO" appears on the LCD.**



4 **Release the TONE SCAN key to start scanning.**

During scanning, the decimal point of the displayed frequency blinks.

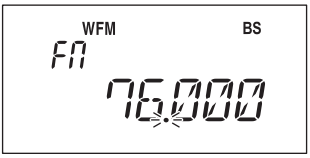
6-1-2 Preset scan

1 **Press the MW V/P/M key to switch to the Preset mode.**

2 **Press the BANK BAND key to select AM radio, FM radio, or TV.**

3 **Press the TONE SCAN key to start scanning.**

During scanning, the decimal point of the displayed frequency blinks.



6-1-3 Memory scan

In Memory mode, either a specified bank or all banks are scanned. The memory scan offers the following three types of scanning methods.

Single-bank scan	This scans only through a specified bank.
Group scan	This scans only a group of previously selected banks.
All-bank scan	This scans all banks from 0 through 9 which are previously programmed.

MEMO
- Bank grouping is possible only when the key pad is installed.
- Banks other than bank 0 through bank 9 cannot be scanned.
- By using the free downloadable software available at the Alinco website, the all-bank scan can be expanded to scan up to 50 banks (0 to 49).

1 Press the MW V/P/M key to switch to Memory mode.

2 Hold down the TONE SCAN key and rotate the dial to select the scanning method.

Each method is displayed as follows on the LCD.
- SINGLE .....Single-bank scan
- GROUP .....Group scan
- ALL .....All-bank scan

When you select single-bank scan, the bank which is currently displayed in Memory mode will be scanned.

3 Release the TONE SCAN key to start scanning.

During scanning, the decimal point of the displayed frequency blinks.

6-1-4 Programmed scan

The Programmed scan searches a range of frequencies specified by upper and lower limits. The specified upper and lower frequencies are collectively reffered to as a "programmed scan channel". The DJ-X30 can store up to 50 pairs of programmed scan channels. For more information, refer to "Programming a memory channel" (☞P. ••). Note that you need to program data in the bank for programmed scan channels in advance. If you do not do this, the following operation cannot be performed.

1 Press the MW V/P/M key to switch to VFO mode, if necessary.

2 While holding down the TONE SCAN key, rotate the dial until "PRGRM" appears on the LCD. Select a pair of programmed scan channels to use for the scan.

3 Release the TONE SCAN key to start scanning.

During scanning, the decimal point of the displayed frequency blinks.

6-2 Memory Skip Function

The Memory Skip function enables you to skip a specified memory channel during the Memory scan operation. Since scanning always stops at active channels, skipping such channels ensures efficient scanning.

1 Press the MW V/P/M key to switch to Memory mode.

2 Select the memory channel you want to skip.

3 Press the [FUNC] key to display the F icon on the LCD.

4 Press the [MONI] key.

"SKIP" appears on the left of the LCD, indicating that the Memory Skip function is set to the channel.

To deactivate the Memory Skip function, select the memory channel and follow steps 3 and 4 above.

The "SKIP" icon on the LCD disappears and the function is deactivated.